Fulfillment/Printing for INPUT

Date 2/28/97 By CR
Program Code EPK7 Project Code EPRB1
INPUT P. O. # 9217 BAC Ref. # ____

Title: Electronic Banking Drives Information Services Expenditures

☐ Report
☒ Research Bulletin
☐ Profiles
☐ Newsletter
☐ Reprints
☐ Other ____

Reports
Fulfillment ~~155~~
Stock ~~105~~
~~+ 200~~
~~305~~
Total ~~460~~
(stock: US -105 UK 200)

Executive OV
Fulfill. ____
Stock ____
TU Pkg. ____
Total ____

Research Bulletin
Fulfillment 155
Stock 305
Total 460

Newsletter
Fulfill. ____

Fulfillment - Please print list to order covers>>

TO: GBC
Covers Order
Date ____
Quantity ____
Color ____
Size ____
P. O. Number ____
GBC Control Number ____

Date/ FedX GBC ____
Date Due INPUT ____
Date Rec. INPUT ____

Date ____
PLEASE PRINT ☐ labels ☐ packing slips
To: BAC ____

TO BRADFORD ADAMS

>>

☐ Folder ☐ Disk ☐ Hard Copy ☐ Blue Form
☐ GBC Cover

Dates
For Set Up/Proof ____
Proof rtn to INPUT ____
Final proof rtn to BA ____
Scheduled to Ship ____

Instructions:
☐ Window Cover
☐ Hot Strip
☒ 3-Hole Drill
☐ Staple
☐ Shrink Wrap
☐ Other ____

Other Information/Notes

Pls print on new Red "Electronic Process Practice" masthead

Return to INPUT Ship Date ____
☐ Originals/Disk in folder
☐ For Stock: ____RP____OV____RB____PR
☐ Internals for Distribution
☐ International for mailing/DHL
☐ Other ____
☐ INPUT *add stock quantity to inventory report*

Vol.I, No. 1 February 1997

Electronic Banking Drives Information Services Expenditures

The five year forecast of expenditures for information services to support worldwide banking, prepared in January 1997, indicates that a period of sharp growth is taking place. Driven by plans for increasing use of systems integration, outsourcing, application software and network services, the use of information services in worldwide banking will grow at a compound rate of 16% over the next five years, as illustrated in the following exhibit.

Exhibit 1

Increase in Banking Expenditures for Information Services

Increase in Expenditures	Forecast Figure
Compound growth rate for 1997-2002.	16%
Expenditures forecast for 2002.	$77 Billion

Source: INPUT

Banks report that the high rate of growth of expenditures for information services is driven by demand for more electronic capabilities from retail and corporate banking activities. The demand comes from activities as diverse as the increasing use of home banking and smart cards in retail banking to improved network applications for cash management and trading in corporate banking activities.

Banks also report that expertise in both information technology (IT) and banking is essential for information services vendors who are helping banks meet requests for the rapid deployment of electronic banking services. IT vendors are finding that this creates a number of opportunities as well as challenges for them.

- IT vendors such as CheckFree, Intuit, and IBM have developed expertise in bank services and processing that have enabled them to market services to support electronic banking to banks.

- IT vendors have also found it necessary to back up their banking knowledge and experience with knowledge of new technology such as developing systems for the Internet or developing software to meet the security needs of smart cards.

- Some IT vendors have developed electronic products and services that appeal to banks, but have unanticipated problems and challenges.

CheckFree has developed banking expertise and processing capabilities to handle home banking and other bill payments. They have also developed expertise in the use of the Internet and other networks that has been essential in gaining business.

- Most of the payments or payment instructions entered by users on the Internet or other networks are transmitted to CheckFree where they are forwarded as an electronic item to an ACH or printed for delivery through the banking system.
- CheckFree has won new business with its ability to handle items electronically and has also acquired business from other vendors. It now has contracts with over 230 banks and 1.25 million subscribers.

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- IBM has also used its knowledge of network applications as well as banking to gain a key vendor position in the Integrion network, where it provides the Intranet used by the banks in this consortium.

IBM as well as CSC and EDS are also known for the major outsourcing contracts that they have in banking which are supporting a number of electronic banking services.

- CSC is supplying outsourcing to J.P. Morgan Bank, a bank known for its international money transfer, cash management and corporate trade systems.
- EDS is supplying technical and banking expertise to support both home banking applications as well as corporate electronic banking systems.

A forecast of a dramatic shift of banking business toward banks that use electronic services, as shown in Exhibit 2, is driving the use of IT vendors to help provide electronic capabilities as rapidly as possible.

Exhibit 2

Impact of Electronic Services On Banking Business

Area of Banking Business	Forecast of Business Driven by Electronic Services in 2001
Retail banking	**$300** billion in lending and other retail products
Retail services provided on the Internet	**$200** billion in retail lending, savings, investment, insurance
Corporate Lending	Over **$500** billion in lending volume

Source: INPUT

The volume of banking business that can be driven by the use of electronic capabilities will amount to over $1 trillion within 5 years.

The banking business that can be driven by the use of electronic services is large enough to make banks as well as non-banks like American Express and Lombard very interested in developing additional capabilities for offering services electronically.

- Among other actions, American Express has obtained a license for the Proton card in order to offer a smart card capability.
- Lombard, a discount brokerage that provides checking services for clients, developed an Internet capability for

investment including money market accounts that grew to 50% of its business in 1996.

Many steps in electronic banking and finance may not be successful, however.

Cybercash launched an interesting concept in digital payment involving the use of credit and debit cards that has not gained the volume of users that were forecast. Its Cybercoin and virtual check products may be more successful.

The E-cash product of DigiCash, which was introduced by Mark Twain Bank, has not gained a meaningful number of customers according to the bank. It may be more successful with European bank clients.

- Now that SET is available to protect credit card transactions, more work may be necessary to convert U.S. bank customers to the use of Cybercash or E-cash solutions.
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Several personal financial service products like Quicken also failed to obtain sufficient users since their developers had not conducted the detailed study of bank retail depositor needs that Intuit performed before launching a product and has continued to perform for Quicken.

- Technical aspects of products may be well thought out such as the development of phones that can enter instructions for paying bills.
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IT vendors serving the banking industry must analyze bank functions and customer characteristics as well as the technology which is promoting the boom in electronic banking.

There is no doubt among banks that electronic banking capabilities are necessary for retail banking services. Bank customers are demanding home banking, use of the Internet, advanced ATM services, and smart cards.

- Banks report that they expect the percentage of worldwide banks that offer home banking to climb to over 80% in the next four years.
- The use of the Internet to sell and perform retail banking is expected to be used by 85% of banks by 2000.

Banks also expect a substantial increase in the use of electronic capabilities in work with corporate customers. As shown in Exhibit 3, the major method that banks expect to use for contact with corporate customers will be electronic within the next five years.

Exhibit 3

Use of Electronic Contact with Corporate Banking Customers

Use of Electronic Contact with Corporate Customers	Bank Estimate of Use	
	1996	2001
Percentage of Transactions and Messages Exchanged Electronically	45%	95%
Percentage of Lending Business Driven by Electronic Banking Services	20%	90%

Source: INPUT

The need for the use of electronic capabilities is driving many banks to seek partnering arrangements with IT vendors.

- These arrangements can provide banks with the means of obtaining knowledge and experience with new technology as well as opportunities to reduce costs and develop electronic capabilities rapidly.
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Partnering arrangements have also provided banks with opportunities for participating in revenues, but the most important benefit of these relationships, according to banks, is obtaining assistance in using new technology, particularly communication and security technology, to meet banking needs.

- Assistance is essential to some banks in order to meet business goals since they do not have technical personnel with up-to-date experience.
- Several banks pointed out that they have technical capabilities such as experience with ATM, ISDN, and cryptographic techniques, but reported they had to use IT vendor assistance to meet ambitious schedules.

The opportunities for IT vendors to supply aid to banks to support electronic banking will increase sharply over the next five years. Expenditures for services will almost double to a global figure of $77 billion between 1997 and 2002.

This Research Bulletin is issued as part of INPUT's U.S. Electronic Process Practice. If you have questions or comments on this bulletin, please call your local INPUT organization or John McGann at INPUT, 1881 Landings Drive, Mountain View, CA 94043-0848, (415) 961-3300.

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Fulfillment - Please print list to order covers>>

Reports
Fulfillment ~~155~~
Stock ~~105~~ ~~200~~ ~~305~~
Total ~~460~~
(stock: US -105 UK 200)

Executive OV
Fulfill.
Stock
TU Pkg.
Total

Research Bulletin
Fulfillment 155
stock 305
Total 460

Newsletter
Fulfill.

TO: GBC
Covers Order
Date
Quantity
Color
Size
P. O. Number
GBC Control Number

Date/ FedX GBC
Date Due INPUT
Date Rec. INPUT

Date
PLEASE PRINT ☐ labels ☐ packing slips
To: BAC

TO BRADFORD ADAMS

>>>

☐ Folder ☐ Disk ☐ Hard Copy ☐ Blue Form
☐ GBC Cover

Dates
For Set Up/Proof
Proof rtn to INPUT
Final proof rtn to BA
Scheduled to Ship

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☐ Window Cover
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☐ Staple
☐ Shrink Wrap
☐ Other

Return to INPUT Ship Date
☐ Originals/Disk in folder
☐ For Stock: RP OV RB PR
☐ Internals for Distribution
☐ International for mailing/DHL
☐ Other
☐ INPUT *add stock quantity to inventory report*

Vol.I, No. 1

February 1997

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EP RB 1

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428

WH corrections

feb? March?

Vol. XXX, No. XXX

January 1997

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~~Non-lending corporate services~~	~~Fees and balances can't be fully estimated.~~

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[illegible]

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